

LISTING OF CLAIMS

Claim 1 (currently amended) A stent ~~for holding open a blood vessel~~ comprising

a first loop containing section, the first loop containing section arranged generally in the circumferential direction, the loops in said first loop containing section occurring at a first frequency;

a second loop containing section, the second loop containing section arranged generally in the circumferential direction, the loops in said second loop containing section also occurring at said first frequency; and

a third loop containing section ~~the third loop containing section~~, the loops in said third loop containing section occurring at a second frequency that is higher than said first frequency, the third loop containing section disposed in the generally circumferential space between said first and second loop containing sections and alternately joined to said first and second loop containing sections;

said first and second loop containing sections are joined together through the third loop containing section and the third loop containing section compensates for foreshortening of the stent during expansion;

said first and second loop containing sections have two cycles for every three cycles of said third loop containing section;

said first and second loop containing sections are 180° out of phase with each other; and

said first, second, and third loop containing sections are single continuous sinusoidals.

Claim 2-50 (canceled)

Claim 51 (new) A stent comprising:

a first loop containing section, the first loop containing section arranged generally in the circumferential direction, the loops in said first loop containing section occurring at a first frequency;

a second loop containing section, the second loop containing section arranged generally in the circumferential direction, the loops in said second loop containing section also occurring at said first frequency; and

a third loop containing section, the loops in said third loop containing section occurring at a second frequency that is higher than said first frequency, the third loop containing section disposed in the generally circumferential space between said first and second loop containing sections and alternately joined to said first and second loop containing sections such that said first and second loop containing sections are joined together through the third loop containing section without connection directly between the first and second loop containing sections wherein the first and second loop containing sections have two cycles for every three cycles of said third loop containing section;

wherein the first and second loop containing sections are 180° out of phase with each other and the first, second, and third loop containing sections are single continuous sinusoidals.

Claim 52 (new) A stent comprising:

a plurality of first circumferential bands containing a pattern of loops at a first frequency;

a plurality of second circumferential bands containing a pattern of loops at a second frequency higher than said first frequency, alternating with said first circumferential bands and periodically coupled thereto to form cells such that said first circumferential bands are joined together through said second circumferential bands without connection directly between said first circumferential bands,

wherein the first circumferential bands containing a pattern of loops are comprised of even first circumferential bands containing a pattern of loops; and odd first

circumferential bands containing a pattern of loops which are 180 degrees out of phase with the loops of the even first circumferential bands, an odd first circumferential band occurring between every two even first circumferential bands wherein each cell includes two cycles of one of said plurality of first circumferential bands and three cycles of one of said plurality of second circumferential bands and the first, and second circumferential bands are single continuous sinusoidals.

Claim 53 (new) A stent comprising:

a first loop containing section, the first loop containing section arranged generally in the circumferential direction, the loops in said first loop containing section occurring at a first frequency;

a second loop containing section, the second loop containing section arranged generally in the circumferential direction, the loops in said second loop containing section also occurring at said first frequency; and

a third loop containing section, the loops in said third loop containing section occurring at a second frequency that is higher than said first frequency, the third loop containing section disposed in the generally circumferential space between said first and second loop containing sections and alternately joined to said first and second loop containing sections such that said first and second loop containing sections are joined together through the third loop containing section without connection directly between the first and second loop containing sections wherein the first and second loop containing sections have two cycles for every three cycles of said third loop containing section;

wherein the first, second, and third loop containing sections are single continuous sinusoidals.

Claim 54 (new) A stent comprising:

a plurality of first circumferential bands containing a pattern of loops at a first frequency;

a plurality of second circumferential bands containing a pattern of loops at a second frequency higher than said first frequency, alternating with said first circumferential bands and periodically coupled thereto to form cells such that said first circumferential bands are joined together through said second circumferential bands without connection directly between said first circumferential bands,

wherein the first circumferential bands containing a pattern of loops are comprised of even first circumferential bands containing a pattern of loops; and odd first circumferential bands containing a pattern of loops, an odd first circumferential band occurring between every two even first circumferential bands wherein each cell includes two cycles of one of said plurality of first circumferential bands and three cycles of one of said plurality of second circumferential bands and the first, and second circumferential bands are single continuous sinusoidals.

Claim 55 (new) A stent comprising:

a first loop containing section, the first loop containing section arranged generally in the circumferential direction, the loops in said first loop containing section occurring at a first frequency;

a second loop containing section, the second loop containing section arranged generally in the circumferential direction, the loops in said second loop containing section also occurring at said first frequency; and

a third loop containing section, the loops in said third loop containing section occurring at a second frequency that is higher than said first frequency, the third loop containing section disposed in the generally circumferential space between said first and second loop containing sections and alternately joined to said first and second loop containing sections such that said first and second loop containing sections are joined together through the third loop containing section without connection directly between the first and second loop containing sections wherein the first and second loop containing sections have two cycles for every three cycles of said third loop containing section;

wherein the first, second and third loop containing sections have struts and the struts of the first and second loop containing sections are wider than the struts of the third loop containing section and the first, second, and third loop containing sections are single continuous sinusoidals.

Claim 56 (new) A stent comprising:

a plurality of first circumferential bands containing a pattern of loops at a first frequency;

a plurality of second circumferential bands containing a pattern of loops at a second frequency higher than said first frequency, alternating with said first circumferential bands and periodically coupled thereto to form cells such that said first circumferential bands are joined together through said second circumferential bands without connection directly between said first circumferential bands,

wherein the first circumferential bands containing a pattern of loops are comprised of even first circumferential bands containing a pattern of loops; and odd first circumferential bands containing a pattern of loops which are 180 degrees out of phase with the loops of the even first circumferential bands, an odd first circumferential band occurring between every two even first circumferential bands wherein each cell includes two cycles of one of said plurality of first circumferential bands and three cycles of one of said plurality of second circumferential bands;

wherein the first, and second circumferential bands have struts and the struts of the first circumferential bands are wider than the struts of the second circumferential bands, and the first, and second circumferential bands are single continuous sinusoidals.